

9122-0072-40; fax +49-9122-9972-13; E-mail: kraus@dresselhaus.de homepage: www.dresselhaus.de

Special assembly instructions for SEMIPONT® 5 & 6

Heat sink specification

- The mounting area on the heatsink must be clean and free from grease and particles
- Finger prints or discolorations on the bottom side do not affect the thermal behaviour

The mechanical specifications for the heatsink are:

- Flatness: 50 µm per 100 mm
- Roughness R_z : 6,3 µm
- Machined without overlaps

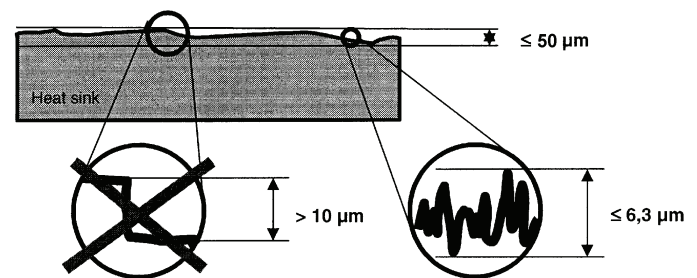


Fig. 1 Heat sink surface specification

Application of thermal grease

In order to avoid air gaps at the interface between the module and the heat sink a thermal grease must be applied. The function of the grease is to flow according to the shape of the interface, allowing a metal-to-metal contact where it is possible, and filling the remaining gaps. Recommended thermal grease material is Wacker-Chemie P 12.

SEMIKRON recommends to use an hard rubber roller or a screen print for an even distribution of the grease.

The thickness of the applied grease layer should be:

Module	Thermal Grease (Wacker P12) Thickness
SEMIPONT® 5	50 - 55 µm
SEMIPONT® 6	50 - 55 µm

The thickness of the applied grease can be checked by a measuring gauge (e.g. Company ELCOMETER Instruments GmbH, Himmlingstr. 18, 73434 Aalen, Tel. +49-7366-919283; Sechseck-Kamm 5 - 150 µm).

Assembly on heatsink

After applying the recommended thickness of thermal grease on the heatsink, tighten the screws applying first a 0,5 Nm torque to each one, in order to lean the module against the heatsink, and then tighten each screw with the corresponding mounting torque:

contents	SEMIPONT® 2 for 8 thyristor bridges	SEMIPONT® 2 for 8 diode bridges
SEMIKRON-Ident-No.	33701500	32759000
Baseplate screws	16 pcs. M5x16 Z4-1 DIN 7985-8.8	16 pcs. M5x16 Z4-1 DIN 7985-8.8
Terminal screws	40 pcs. M5x8 Z4-1 DIN 7985-4.8	40 pcs. M5x8 Z4-1 DIN 7985-4.8
Washers	included on combi-screw	included on combi-screw
Crinkle washers	included on combi-screw	included on combi-screw
gate plugs	48 pcs. B2,8-1 for plug 2,8 x 0,8 mm	-
plug f. aux. cathode	48 pcs. 2,8 x 0,8 inside 5,1mm 32409700	-
insulating plug caps	48 pcs. 1-fold 32769500	-

contents	SEMIPONT 3 for 8 diode bridges	SEMIPONT 4 for 4 diode bridges
SEMIKRON-Ident-No.	33404200	33404300
Baseplate screws	16 pcs. M5x16 Z4-1 DIN 7984-8.8	8 pcs. M6x20 Z4-1 DIN 7985-8.8
Terminal screws	40 pcs. M5x12 Z4-1 DIN 7985-4.8	20 pcs. M6x12 Z4-1 DIN 7985-4.8
Washers	included on combi-screw	included on combi-screw
Crinkle washers	included on combi-screw	included on combi-screw

contents	SKB 33, SKB/D 50 for 6 bridges
SEMIKRON-Ident-No.	33404400
Baseplate screws	12 pcs. M4x8 Z4-1 DIN 7985-4.8
Terminal screws	30 pcs. M5x10 Z4-1 DIN 7985-4.8
Washers	included on combi-screw
Crinkle washers	included on combi-screw
gate plugs	12 pcs. 13,5x4 for plug 1,3mm

Recommended: posidrive screws M...x... DIN 7985...(Z4-1) (with captive crinkle washers and washers) are also available from Muenchner Schraubenhandel, Dresselhaus KG., D-91126 Schwabach, Germany, Phone +49-